

POSITION DESCRIPTION (Please Read Instructions on the Back)

2. Reason for Submission ☐ Redescription ☐ Reestablishment ☒ New ☐ Hdqtrs ☒ Field ☐ Other		3. Service		4. Employing Office Location		5. Duty Station		6. OPM Certification No.	
Explanation (Show any positions replaced) NPS Standard Position Description Resources Careers		7. Fair Labor Standards Act ☒ Exempt ☐ Nonexempt		8. Financial Statements Required ☐ Executive Personnel Financial Disclosure ☐ Employment and Financial Interest		9. Subject to IA Action ☒ Yes ☐ No		10. Position Status ☒ Competitive ☐ Excepted (Specify in Remarks) ☐ SES (Gen.) ☐ SES (CRI)	
		11. Position is ☐ Supervisory ☐ Managerial ☒ Neither		12. Sensitivity ☒ 1-Non-Sensitive ☐ 2-Noncritical Sensitive ☐ 3-Critical ☐ 4-Special Sensitive		13. Competitive Level Code		14. Agency Use *R21	

15. Classified/Graded by	Official Title of Position	Pay Plan	Occupational Code	Grade	Initials	Date
a. Office of Personnel Management						
b. Department, Agency or Establishment						
c. Second Level Review	Horticulturist	GS	0437	11		
d. First Level Review						
e. Recommended by Supervisor or Initiating Office						

16. Organizational Title of Position (if different from official title) Horticulturist		17. Name of Employee (if vacant, specify)	
18. Department, Agency, or Establishment Department of the Interior		c. Third Subdivision	
a. First Subdivision National Park Service		d. Fourth Subdivision	
b. Second Subdivision		e. Fifth Subdivision	
		Signature of Employee (optional)	

19. Employee Review-This is an accurate description of the major duties and responsibilities of my position.

20. Supervisory Certification. I certify that this is an accurate statement of the major duties and responsibilities of this position and its organizational relationships, and that the position is necessary to carry out Government functions for which I am responsible. This certification is made with the knowledge that this information is to be used for statutory purposes relating to appointment and payment of public funds, and that false or misleading statements may constitute violations of such statutes or their implementing regulations.

a. Typed Name and Title of Immediate Supervisor	b. Typed Name and Title of Higher-Level Supervisor or Manager (optional)
Signature _____ Date _____	Signature _____ Date _____

21. Classification/Job Grading Certification. I certify that this position has been classified/graded as required by Title 5, U.S. Code, in conformance with standards published by the U.S. Office of Personnel Management or, if no published standards apply directly, consistently with the most applicable published standards.	22. Position Classification Standards Used in Classifying/Grading Position See Classification Evaluation Statement for Standards Used to Grade this Position.
Typed Name and Title of Official Taking Action J. LYNN SMITH HUMAN RESOURCES PROGRAM MANAGER	Information for Employees. The standards, and information on their application, are available in the personnel office. The classification of the position may be reviewed and corrected by the agency or the U.S. Office of Personnel Management. Information on classification/job grading appeals, and complaints on exemption from FLSA, is available from the personnel office or the U.S. Office of Personnel Management.

Signature <i>J. Lynn Smith</i>	Date JUN 30 1999									
23. Position Review	Initials	Date	Initials	Date	Initials	Date	Initials	Date	Initials	Date
a. Employee (optional)										
b. Supervisor										
c. Classifier										

24. Remarks *Agency Use Code should be entered in FPPS as last three spaces of position allocation number.

25. Description of Major Duties and Responsibilities (See Attached)

**NATIONAL PARK SERVICE
BENCHMARK POSITION DESCRIPTION**

**Horticulturist
GS-437-11**

Introduction

The incumbent serves one or more parks as a specialist in the principles and practices of landscape management with advanced training in the science, theories, concepts, methods, and techniques of horticulture and related fields. The horticulturist is responsible for program development and implementation to protect and preserve physical characteristics, biotic systems, historic, and contemporary use of the park's landscape.

Major Duties (80-100%)

Develops and prepares sections of the resources management plan dealing with horticulture and related landscape, vegetation, and soil management. Prepares specific action plans needed to manage the flora and soil components of landscapes.

Represents the superintendent when working with others on horticultural matters. Develops and maintains liaisons and effective working relations with related groups and individuals, agencies, and the public. Attends management and professional conferences and other events for the purposes of exchanging information and advancing advocacy for park stewardship.

Serves as the professional horticulturist responsible for the identification, research, planning, treatment, preservation, and maintenance of landscapes. Performs duties associated with review, design, treatment, stewardship, and monitoring of landscapes.

Determines effectiveness of landscape maintenance and management programs and operations as applied to acceptable horticultural standards. Conducts inspections, prepares recommendations and reports, and maintains detailed records and data of landscape maintenance operations, historical records, and the condition of landscape features.

Provides technical guidance for landscape management operations determining equipment and material requirements, and has items ready so as not to delay work. Explains work requirements, methods, and procedures based on horticultural standards. Trains crews to use proper techniques and may directly supervise work.

Develops landscape maintenance plans, specifications, and schedules. Conducts feature inventories and condition assessments, determines stabilization and corrective work needed, establishes routine and cyclic maintenance program, sets operational priorities, keeps records of maintenance activities and evaluates effectiveness of landscape maintenance operation.

In cooperation with appropriate staff, researchers, and partners, the incumbent designs, develops, tests, and implements scientific monitoring protocols to identify, evaluate, and do long-term monitoring of landscapes and horticultural resources. Develops monitoring systems that address current management needs and improve quality and value of data collected. Conducts monitoring of landscape and associated resources, collects and analyzes data, evaluates significance of findings, prepares reports, makes recommendations for follow-up.

Performs data collection using advanced technology such as electronic data collectors when appropriate. Performs data entry and carries out quality control checks on data collection and entry performed by others. Conducts analysis of complex data. Determines and documents the significance of findings.

Negotiates cooperative and interagency agreements and other cooperative instruments needed to effectively carry out resource stewardship goals.

Identifies research needs, prepares requests for proposals or statements of work, and provides oversight for scientific and historical research projects. Serves as Contracting Officer's Technical Representative for projects conducted through contracts, interagency agreements, and cooperative agreements. Evaluates research results for management implications.

Conducts and coordinates research projects related to the identification, documentation, evaluation, and treatment of landscapes. Examines historical documents, photographs, maps and drawings, and related items to develop knowledge of and data about specific cultural landscapes and their features, such as period design concepts, land use patterns, cultural traditions, period maintenance practices, period landscape character, and historic plant materials.

Prepares management and scientific reports regarding the results of restoration, construction, inventory, monitoring, and research activities. Summarizes new and conventional information for use by scientists, managers, preservation communities, park staff, cooperators, and partners.

Incorporates appropriate GIS technology into job to provide comprehensive and scientifically sound answers to inquiries from managers and others. Uses automatic methods of data collection, analysis or illustration. Inputs data into digital form and uses computer applications for data analysis, manipulation, and presentation.

Prepares environmental assessments (EAs) for projects in compliance with the National Environmental Policy Act and ensures compliance with the National Historic Preservation Act. Evaluates EAs and environmental impact statements prepared by other agencies or groups for impacts on park resources.

Conducts plant inventories, identifies plant species, determines threatened/endangered or rare status, and documents location and range. Collects,

prepares and documents representative plant specimens for the park herbarium. Designs floral displays.

May be principal coordinator for the preservation, restoration, and/or rehabilitation of cultural landscapes, including features such as tree and shrub plantings, formal gardens, fields, wetlands, ponds, trails, and roads. Responsible for preserving historically and/or botanically significant plants through field conservation and/or clonal propagation to protect the integrity and character of cultural landscapes. Supervises cultural landscape treatment and construction activities. Records all landscape preservation, restoration, rehabilitation or treatment activities for the historical record.

May carry out program management duties by developing and managing work plans and schedules, scopes of work, cost estimates, and budget proposals and/or grants to justify funding requests and accomplish goals. May administer and track project and operating funds and prepare accomplishment reports, as needed. Maintains awareness of applicable funding sources within NPS and outside.

May represent park on NPS regional task groups or similar organizations. Makes presentations in parks, public gatherings, and professional meetings.

May serve as integrated pest management coordinator to identify pests, monitor activity and damage, set action thresholds, establish treatment, monitor results, evaluate treatments, and prepare reports.

May supervise seasonal, temporary, permanent, VIP, and other personnel, but less than 25% of the time.

Factor 1. Knowledge Required by the Position Level 1-7; 1250 points

Knowledge of NPS planning and management requirements and guidelines so that plans result in programs that provide adequate long-term protection for resources.

Professional knowledge of the scientific theories, practices, and principles which underlie the discipline of horticulture. Ability to use this knowledge to recognize a substantial range of horticultural problems and the scientific implications of these problems.

Comprehensive knowledge of the fields of horticulture, botany, plant physiology, genetics, plant pathology, entomology, and soil sciences. Ability to employ methodology from these disciplines skillfully and with precision in different work situations.

Ability to make refined observations, interpret their horticultural implications, and make accurate and precise reports on the results of these observations.

Basic knowledge of program management and administration of budgets, contracts,

and personnel.

Knowledge of horticultural history including period design, plant varieties, and maintenance techniques.

Knowledge of all practical aspects of horticultural and landscape construction procedures. Ability to select ways in which horticultural methods, procedures, and techniques can be applied, adapted or modified to solve problems.

Knowledge of scientific data acquisition and analysis standards, methods, and recording techniques so that the incumbent can efficiently manage the collection and summation of data, and accomplish data analysis in a way that is highly credible and meets scientifically acceptable standards.

Knowledge of regulations, policies, and guidelines regarding the management and monitoring of horticultural resources, including genetic integrity of witness plants and threatened historic cultivars, in order to assure that program goals and objectives reflect national priorities and policies.

Knowledge of NPS guidelines, procedures, and techniques required for the preservation, mounting, labeling, storage, and cataloguing of specimens in order to insure that specimens are adequately preserved and properly accessioned into the park's natural history collection.

Knowledge of current NPS guidelines and regulations concerning integrated pest management and the applications of various pesticides.

Knowledge of computer hardware, software, and application so that information, primarily field data, can be processed, summarized, and reports generated.

Skill in oral and written communication in order to insure that plans are well written and easily understood, scientific reports and journal articles are of high scientific credibility, pertinent information is shared effectively with others, and oral presentations are well designed, informative, and clearly convey the intended message.

Factor 2. Supervisory Controls Level 2-4; 450 points

The supervisor sets the overall goals and resources available. Guidance is provided only to determine priorities, approve work plans, and assist in working through unprecedented situations that have a bearing on the overall program.

The incumbent is expected to plan, design, implement, and manage the program with a minimum of direct supervision. The incumbent resolves most problems that arise and coordinates the work both within the work unit and with other park divisions. Independent judgement is required on a regular basis in developing, testing, and refining procedures and methods, and in the application of these methods in the field. The incumbent is expected to independently design and carry out specific projects

and assignments to their completion. The incumbent keeps the supervisor informed of progress, potentially controversial problems, and concerns, issues or other matters having far-reaching implications. The supervisor evaluates the completed work based on general adequacy in meeting program or project objectives, expected results, and compatibility with other work.

Factor 3. Guidelines Level 3-3; 275 points

Guidelines include laws, regulations, policies, scientific protocols, plans, procedures, and any additional directions given and defined by the supervisor. Although available, they are not completely applicable to the work or have gaps in specificity. The employee uses judgement in interpreting and adapting guidelines for specific cases or problems, then analyzes results to recommend changes.

Sound judgement must be exercised in the performance of duties where gaps in specificity or conflicts among guidelines occur. The horticulturist uses judgement in determining which appropriate alternatives should be used, and in interpreting and adapting guidelines for application to specific situations or problems. The incumbent is expected to know when work is precedent setting, affects policy and requires supervisory review, or needs review at a higher level of expertise within the relevant discipline.

Factor 4. Complexity Level 4-4; 225 points

National park units are often complex landscapes containing a diversity of natural communities and cultural resources. The variety of knowledge and ability required to effectively carry out the program is extensive and requires the incumbent to adopt a highly creative approach to program management that utilizes the expertise of a wide range of cooperators. The work includes varied duties that require many different and unrelated process and methods. Decisions regarding what needs to be done include the assessment of unusual circumstances, variations in approach, and incomplete or conflicting data. Many decisions are made concerning such things as interpretation of considerable data, planning the work or refinement of the methods and techniques to use.

Horticultural activities can require substantial initiative and skill in building consensus and obtaining public and cooperating agency support. The design, testing, implementation, and analysis of identification, preservation, restoration, and monitoring programs are very complex and highly scientific endeavors. Duties require the evaluation of alternative methods and competing priorities to determine the best approach to program and project development. Factors and conditions differ according to the tasks and procedures being completed and phase of work being done.

The position requires the horticulturist to relate new work situations to precedent situations, extend or modify existing techniques, or develop compromises which require substantial effort to overcome resistance to change when it is necessary to modify an accepted method or approach. The incumbent must apply strict quality control measures to assure credibility of findings.

Factor 5. Scope and Effect Level 5-3; 150 points

The core long-term mission of the agency in all NPS units is the preservation and effective management of the natural and cultural resources for which the park was established. The successful accomplishment of the duties of this position affects the quality and effectiveness of horticultural programs. The work involves treating a variety of conventional problems, questions or situations in conformance with established criteria. The product or service affects the design or operation of programs, and the adequacy of activities such as field projects or research conclusions. Activities developed and conducted by the incumbent are essential to restoring and maintaining landscapes. Information gained through research, inventory, and monitoring provide the scholarly and professionally credible basis for decisions.

The work is to develop and implement plans and strategies to protect landscapes and resolve problems with solutions that achieve management objectives. Programs carried out by the incumbent directly effect the preservation or enhancement of the ecological and cultural integrity of the parks and managed landscapes.

Factor 6. Personal Contacts Level 6-3; 60 points

Contacts are made with horticulturists, resources managers, and subject matter experts of other agencies, researchers, and other members of the scientific and landscape preservation community, science and management staff of other parks, preservation organizations, the media, the general public, universities, and other park staff. Contacts typically are not established on a routine basis, and the role and authority are identified and developed during the course of the contact.

Factor 7. Purpose of Contacts Level 7-2; 50 points

The purposes of the contacts are to provide professional advice to managers and other staff; to exchange information; to provide instruction and services; to coordinate and advise on mutual work efforts and research; to insure compliance with laws and regulations; to train; to procure supplies and materials; and to secure cooperation for park programs from other agencies, individuals or interest groups.

Factor 8. Physical Demands Level 8-2; 20 points

The position may require strenuous physical activity including periods of standing, walking, climbing, and lifting and carrying heavy objects. Some activities will occur in physically dangerous areas or settings. Documentary research and report writing work is sedentary, which entails the ability to concentrate and write for long periods of time.

Factor 9. Work Environment Level 9-2; 20 points

Work is performed both indoors and outdoors in all types of weather. Employee may be exposed to inclement weather, wide temperature ranges, chemicals, and machine

noises and hazards.

Total Points 2500



Resources Careers